



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,591	11/26/2003	Mooi Choo Chuah	CHUAH 76-11 (LCNT/126067)	7590
46363	7590	06/15/2007	EXAMINER	
PATTERSON & SHERIDAN, LLP/ LUCENT TECHNOLOGIES, INC 595 SHREWSBURY AVENUE SHREWSBURY, NJ 07702			LEE, JOHN J	
		ART UNIT	PAPER NUMBER	
				2618
		MAIL DATE	DELIVERY MODE	
		06/15/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)
	10/723,591	CHUAH ET AL.
	Examiner	Art Unit
	JOHN J. LEE	2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 28 March 2007.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-6,8-17,19 and 21 is/are rejected.
- 7) Claim(s) 7,18 and 20 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ . |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>3/5/04</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| | 6) <input type="checkbox"/> Other: _____ . |

DETAILED ACTION

Response to Arguments/Amendment

1. Applicant's arguments/amendments received on March 28, 2007 have been carefully considered but they are not persuasive because the teaching of all the cited reference reads on all the rejected claims as set forth in the previous rejection. Therefore, the finality of this Office Action is deemed proper.

Contrary to the assertions at pages 7 - 10 of the Arguments, claims 1, 8, and 15 are not patentable.

During examination, the USPTO must give claims their broadest reasonable interpretation.

Re claims 1 and 8: Applicant argues that the teaching of Kim et al. (US 2004/0131026) does not teach the claimed invention “determining a first subset of the plurality of users and a second subset of the plurality of users based upon the measured power ratio”. However, The Examiner respectfully disagrees with Applicant’s assertion that Kim does not teach the claimed invention. Contrary to Applicant’s assertion, the Examiner is of the opinion that Kim teaches determining the two subsets (dividing group of mobile user equipments) that selecting the number of user equipments located in a particular cell is smaller than a threshold for the first subset (mobile user equipments) and a particular cell is larger than or equal to the threshold for second subset (mobile user equipment) based on the power measurement report message (see pages 6, paragraphs 61 – 63 and Fig. 5, 8), regarding the claimed limitation. More specifically, determining the first mobile user equipments (first group) by a smaller than a certain threshold for

transmission power measurement in a located particular cell, and also determining the second mobile user equipments (second group) by a larger than or equal to a certain threshold for transmission power measurement in the located particular cell, means dividing the two group in a cell based on the transmission power measurement.

Furthermore, the claimed limitation does not require or limit for any special determining user group.

Re claim 15: Applicant also argues that the Kim does not teach the claimed invention “IMM transmitting said messages via two different transmission schemes to two subsets of the plurality of user according to the power measurement requirement information”. However, The Examiner respectfully disagrees with Applicant’s assertion that Kim does not teach the claimed invention. Contrary to Applicant’s assertion, the Examiner is of the opinion that Kim teaches receiving a power threshold and a waiting time provided from the radio network controller before receiving the measurement command and issuing a command to measure total transmission power of a dedicated channel providing and the multicast service in the cell, and receiving, by the radio network controller, a report on the measurement result (collecting information indicating of the power requirement) in which the total transmission power measured in response to the measurement command exceeds the power threshold for the waiting time (comparing the total transmission power and a power ratio threshold by the measurement command), and transmits notification of power requirement, and transmitting notification message to the first and second group of user equipments with determined first and second transmission scheme (PTP and PTM) based on power requirement command, and

determining the first mobile user equipments (first group) by a smaller than a certain threshold for transmission power measurement in a located particular cell, and also determining the second mobile user equipments (second group) by a larger than or equal to a certain threshold for transmission power measurement in the located particular cell, means dividing the two group in a cell based on the transmission power measurement (see pages 6, paragraphs 61 – pages 7, paragraphs 75 and Fig. 5, 8), regarding the claimed limitation.

Applicant's attention is directed to the rejection below for the reasons as to why this limitation is not patentable.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 8 - 14 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Regarding **claims 8 - 14**: the limitation “A computer readable medium containing a program” is not patentable since the limitation does not fall under one of the statutory categories such that process, machine, manufacture or composition of matter.

The preamble of the claim 8 - 14 must start out as “a computer readable medium having a stored computer program”.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1 – 6, 8 – 13, 15 – 17, 19, and 21** are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. (US 2004/0131026).

Regarding **claims 1 and 8**, Kim teaches that multicasting a message to a plurality of users (Fig. 4 and pages 3, paragraphs 26 – 28). Kim teaches that establishing a power ratio threshold adapted to enable reliable transmission of said message (Fig. 4 and pages 3, paragraphs 26 – 28, where teaches a power threshold and a waiting time provided from the radio network controller (establishing a power ratio threshold, the network sets the power ratio threshold for reliable signal transmission) before receiving the measurement command). Kim teaches that comparing the established power ratio threshold to measured power ratios associated with said plurality of users (Fig. 4, pages 3, paragraphs 26 – 28, and pages 4, paragraphs 43 – pages 5, paragraphs 48, where teaches a power threshold and a waiting time provided from the radio network controller before receiving the measurement command and issuing a command to measure total transmission power of a dedicated channel providing the multimedia broadcast/ multicast service in the cell, and receiving, by the radio network controller, a report on the measurement result in which the total transmission power measured in response to the measurement command

exceeds the power threshold for the waiting time (comparing the total transmission power and a power ratio threshold by the measurement command)). Kim teaches that determining a first subset (selecting the number of user equipments located in a particular cell is smaller than a threshold) of the plurality of users (user equipments) and a second subset (selecting the number of user equipments located in a particular cell is larger than or equal to the threshold) of the plurality of users based upon the measured power ratios (pages 6, paragraphs 61 – 63, Fig. 5, 8, and pages 8, paragraphs 89 – pages 9, paragraphs 91, where teaches selecting the number of user equipments located in a particular cell is smaller than a threshold and a particular cell is larger than or equal to the threshold based on the power measurement report message). Kim teaches that delivering said message to the first subset of the plurality of users via a first transmission scheme (pages 6, paragraphs 61 – pages 7, paragraphs 75, Fig. 5, 8, and pages 8, paragraphs 89 – pages 9, paragraphs 91, where teaches transmitting notification message to the first group of user equipments with determined first transmission scheme).

Regarding **claims 2 and 9**, Kim teaches that delivering said message to the second subset of the plurality of users via a second transmission scheme (pages 6, paragraphs 61 – pages 7, paragraphs 75, Fig. 5, 8, and pages 8, paragraphs 89 – pages 9, paragraphs 91, where teaches transmitting notification message to the second group of user equipments with determined second transmission scheme).

Regarding **claims 3 and 10**, Kim teaches that the first transmission scheme delivering said message to the first user subset is via a broadcast channel (pages 6, paragraphs 61 – pages 7, paragraphs 75, Fig. 5, 8, and pages 8, paragraphs 89 – pages 9,

paragraphs 91, where teaches transmitting notification message to the first group of user equipments with determined first transmission scheme via a multimedia broadcast service).

Regarding **claims 4 and 11**, Kim teaches that the second transmission scheme delivering said message to the second user subset is via respective dedicated channels (pages 6, paragraphs 61 – pages 7, paragraphs 75, Fig. 5, 8, and pages 8, paragraphs 89 – pages 9, paragraphs 91, where teaches transmitting notification message to the second group of user equipments with determined second transmission scheme via a dedicated channels).

Regarding **claims 5 and 12**, Kim teaches that periodically measuring the respective power ratios of said plurality of users (pages 5, paragraphs 47 – 48 and Fig. 4, where teaches periodically measuring the total power ratio of the user equipments).

Regarding **claims 6 and 13**, Kim teaches that continuously measuring the respective power ratios of said plurality of users (pages 6, paragraphs 59 – 63 and Fig. 5, where teaches continuously measuring the power ratio of the user equipments).

Regarding **claim 15**, Kim teaches all the limitation as discussed in claim 1. Furthermore, Kim further teaches that an intermediate multicasting module (multicasting service) adapted for receiving said messages and collecting information indicative of power transmission requirements (Fig. 4, pages 3, paragraphs 26 – 28, and pages 4, paragraphs 43 – pages 5, paragraphs 48, where teaches receiving a power threshold and a waiting time provided from the radio network controller before receiving the measurement command and issuing a command to measure total transmission power of a

dedicated channel providing and the multicast service in the cell, and receiving, by the radio network controller, a report on the measurement result (collecting information indicating of the power requirement) in which the total transmission power measured in response to the measurement command exceeds the power threshold for the waiting time (comparing the total transmission power and a power ratio threshold by the measurement command), and transmits notification of power requirement), Kim teaches that IMM transmitting said messages via two different transmission schemes (PTP and PTM) according to the power transmission requirement information (pages 6, paragraphs 61 – pages 7, paragraphs 75, Fig. 5, 8, and pages 8, paragraphs 89 – pages 9, paragraphs 91, where teaches transmitting notification message to the first and second group of user equipments with determined first and second transmission scheme based on power requirement command).

Regarding **claim 16**, Kim teaches that the intermediate multicasting module further comprises a node-B (node-B in Fig. 4) element and a radio network controller (RNC in Fig. 4) (Fig. 4 and pages 4, paragraphs 43 – pages 5, paragraphs 48).

Regarding **claim 17**, Kim teaches that the node-B element collects the information indicative of power transmission requirements (Fig. 4 and pages 4, paragraphs 43 – pages 5, paragraphs 48, where teaches node-B receives and collects the power transmission requirement information).

Regarding **claim 19**, Kim teaches that the two different transmission schemes are broadcasting to a first subset of said plurality of users and unicasting (multicast) to a second subset of said plurality of users (pages 6, paragraphs 61 – 63, Fig. 5, 8, and pages

8, paragraphs 89 – pages 9, paragraphs 91, where teaches selecting the number of user equipments located in a particular cell is smaller than a threshold and a particular cell is larger than or equal to the threshold based on the power measurement report message, and broadcasts and multicasts first and second group of users).

Regarding **claim 21**, Kim teaches that the first subset of users has power requirements different from the second subset of users (teaches determining the two subsets (dividing group of mobile user equipments) that selecting the number of user equipments located in a particular cell is smaller than a threshold for the first subset (mobile user equipments) and a particular cell is larger than or equal to the threshold for second subset (mobile user equipment) based on the power measurement report message, so that first and second subset have different power requirement (see pages 6, paragraphs 61 – 63 and Fig. 5, 8)).

Allowable Subject Matter

5. Claims 7, 18, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art record fails to disclose the limitation “the step of determining is performed by evaluating an specific equation formula with explanations, and the information indicative of power transmission requirements is a ratio measure of a pilot power signal broadcast from a source to one of said plurality of users to received power

Art Unit: 2618

plus noise density of the pilot power signal received by said one of said plurality of users" as specified in the claims.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Conclusion

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231
Or P.O. Box 1450
Alexandria VA 22313

Art Unit: 2618

or faxed (571) 273-8300, (for formal communications intended for entry)

Or: (703) 308-6606 (for informal or draft communications, please label
"PROPOSED" or "DRAFT").

Hand-delivered responses should be brought to USPTO Headquarters,
Alexandria, VA.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **John J. Lee** whose telephone number is **(571) 272-7880**. He can normally be reached Monday-Thursday and alternate Fridays from 8:30am-5:00 pm. If attempts to reach the examiner are unsuccessful, the examiner's supervisor, **Edward Urban**, can be reached on **(571) 272-7899**. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is **(703) 305-4700**.

J.L
June 8, 2007

John J Lee



EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600